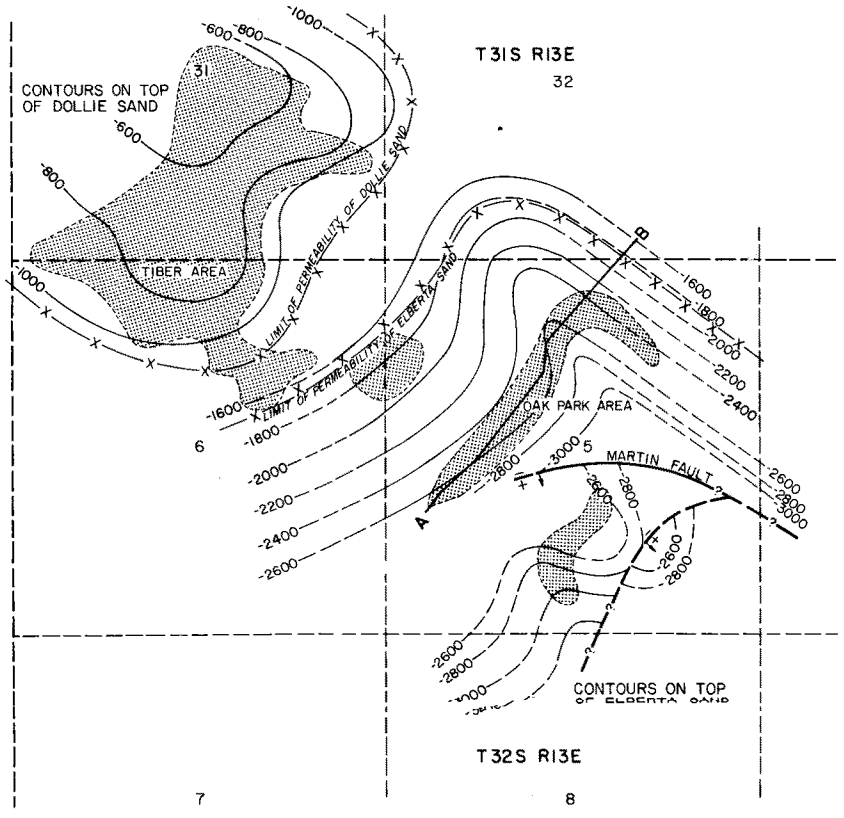
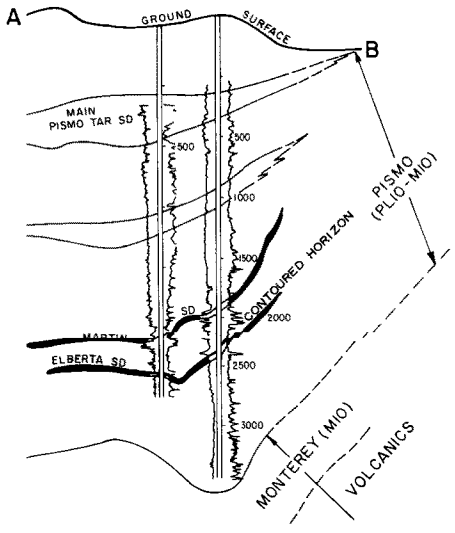
ARROYO GRANDE OIL FIELD





LOCATION: 18 miles northwest of Santa Maria

TYPE OF TRAP: See areas

ELEVATION: 100 - 600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production: Oil (bbl)	Initial daily production: Gas (Mcf)	Date of completion
Dollie	Mindevco, Inc. "Tiber" 1	Tiber Pacific Oil Co. "Tiber" 1	6 32S 13E	MD	N.A.	N.A.	Jul 1906

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth: Strata	At total depth: Age
C. W. Colgrove "Elberta" 1-5	Same	Nov 1949	5 32S 13E	MD	10,142	Monterey	Miocene

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic: Age	Geologic: Formation	Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required

PRODUCTION DATA (Jan. 1, 1974)

1973 Production: Oil (bbl)	1973 Production: Net gas (Mcf)	1973 Production: Water (bbl)	1973 Proved acreage	1973 Average number producing wells	Cumulative production: Oil (bbl)	Cumulative production: Gas (Mcf)	Peak oil production: Barrels	Peak oil production: Year	Total number of wells: Drilled	Total number of wells: Completed	Maximum proved acreage
47,610	0	239,144	410	23	3,420,508	32,364	170,438	1968	145	96	480

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS:

REFERENCES: Krueger, M.L., Arroyo Grande (Edna) Oil Field: Calif. Div. of Mines Bull. 118, p. 450 (1938).
Lawrence, E.D., Arroyo Grande (Edna) Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 1, p. 41 (1958).
McLaughlin, R.P., and C.A. Waring, Petroleum Industry of California: Calif. Mining Bureau Bull. 69, p. 430 (1914).
Vander Leck, L., Petroleum Resources of California: Calif. State Mining Bureau Bull. 89, p. 95 (1921).

CALIFORNIA DIVISION OF OIL AND GAS

OAK PARK AREA

ARROYO GRANDE OIL FIELD

San Luis Obispo County

LOCATION: See map sheet of Arroyo Grande Oil Field

TYPE OF TRAP: Faulted homocline on north limb of Pismo syncline

ELEVATION: 100 - 600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production: Oil (bbl)	Initial daily production: Gas (Mcf)	Date of completion
Martin	C. A. Maino, et al "Rauschenplat" 6	McKeon Drilling Co., Inc. "Elberta" 2	5 32S 12E	MD	80	N.A.	May 1929
Elberta	California Fuel Oil Co., Inc. 5	Elberta Oil Co. "Elberta" 1	5 32S 12E	MD	N.A.	N.A.	1930

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth: Strata	At total depth: Age
C. W. Colgrove "Elberta" 1-5	Same	Nov 1949	5 32S 13E	MD	10,142	Monterey	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic: Age	Geologic: Formation	Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
Martin	2,890	50	early Pliocene - late Mio	Pismo	15	N.A.	None
Elberta	3,100	50	early Pliocene - late Mio	Pismo	14	1,125	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production: Oil (bbl)	1973 Production: Net gas (Mcf)	1973 Production: Water (bbl)	1973 Proved acreage	1973 Average number producing wells	Cumulative production: Oil (bbl)	Cumulative production: Gas (Mcf)	Peak oil production: Barrels	Peak oil production: Year	Total number of wells: Drilled	Total number of wells: Completed	Maximum proved acreage
6,450	0	485	90	4	N.A.	N.A.	N.A.	N.A.	29	14	110

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
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SPACING ACT: Does not apply

BASE OF FRESH WATER: 700 - 1,200

CURRENT CASING PROGRAM: 8 7/8" or 7" cem. above zone and across base of fresh-water sands; 6 5/8" or 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is discharged into unlined sumps (sumps are being phased out).

REMARKS: The water in the Elberta sand contains 26 ppm boron and is unsuitable for irrigation.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

ARROYO GRANDE OIL FIELD

TIBER AREA

San Luis Obispo County

LOCATION: See map sheet of Arroyo Grande Oil Field

TYPE OF TRAP: Homocline on north limb of Pismo syncline

ELEVATION: 100 - 600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production: Oil (bbl)	Initial daily production: Gas (Mcf)	Date of completion
Dollie	Mindevco, Inc. "Tiber" 1	Tiber Pacific Oil Co. "Tiber" 1	6 32S 12E	MD	N.A.	N.A.	Jul 1906
Martin	Getty Oil Co. "Thompson" 1	San Luis Obispo Mutual Oil Co. "Mutual Well" 1	5 32S 13E	MD	N.A.	N.A.	Nov 1908
Elberta	Same as above	Same as above	5 32S 13E	MD	N.A.	N.A.	Nov 1908

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth: Strata	At total depth: Age
Mindevco, Inc. "Adams" 1	William C. McDuffie "Adams" 1	Jul 1944	31 31S 13E	MD	3,833	Monterey	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic: Age	Geologic: Formation	Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
Dollie	750	300	early Pliocene - late Mio	Pismo	15	60	None
Martin	2,000	100	early Pliocene - late Mio	Pismo	13	N.A.	None
Elberta	2,500	100	early Pliocene - late Mio	Pismo	13	N.A.	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production: Oil (bbl)	1973 Production: Net gas (Mcf)	1973 Production: Water (bbl)	1973 Proved acreage	1973 Average number producing wells	Cumulative production: Oil (bbl)	Cumulative production: Gas (Mcf)	Peak oil production: Barrels	Peak oil production: Year	Total number of wells: Drilled	Total number of wells: Completed	Maximum proved acreage
41,160	0	238,659	320	19	N.A.	N.A.	N.A.	N.A.	116	82	370

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1949	595,030	5
Cyclic steam	1965	228,196	19
Fire flood	1964	197,500	1

SPACING ACT: Does not apply

BASE OF FRESH WATER: 700 - 1,200

CURRENT CASING PROGRAM: 8 7/8" or 7" cem. above zone and across base of fresh-water sands; 6 5/8" or 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected or disposed of into unlined sumps (sumps are being phased out).

REMARKS: Produced water from the Dollie zone has a high concentration of sodium bicarbonate.

REFERENCES: